

Thunderstorms in Alabama



Thunderstorms are a common occurrence in Alabama. Although they can strike at any time, thunderstorms are more frequent during the warm season in the spring, summer, and early fall months. Tornadoes, lightning, damaging wind, hail, and flooding are the main hazards from thunderstorms.

The best defense against thunderstorms is to stay inside a substantial building. Shelter can protect you from deadly lightning, strong winds, possible large hail, and heavy rainfall. Fortunately, thunderstorms do not usually last for a long time and will generally pass in less than an hour. When thunderstorms are expected, be sure to pick up loose objects around your home or business before the storms arrive as they can become damaging and/or deadly missiles in strong winds.

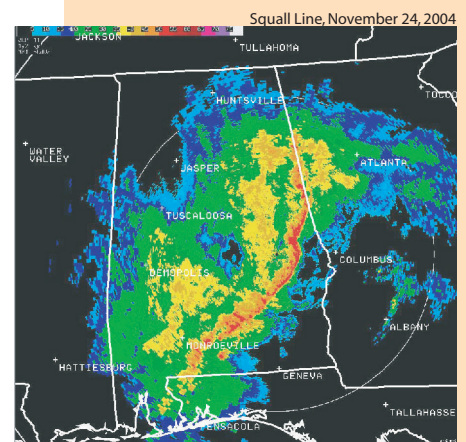
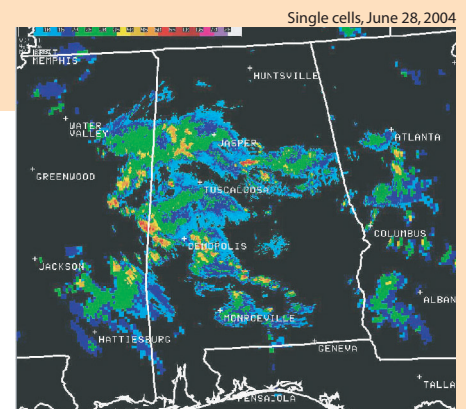
Thunderstorms are categorized into three main types: Single-cell, Squall Line (Multi-cell), and Supercell.

Single-cell thunderstorms, also known as pulse, airmass, or summertime thunderstorms, are individual or clusters of thunderstorms that are not usually severe. Frequent lightning strikes and locally heavy rainfall capable of producing flooding are the main hazards from these storms as they are slow-movers. These storms usually occur in the summertime when the atmosphere is warm and unstable, but winds are weak.

Severe Thunderstorm - A thunderstorm producing tornadoes, winds at or above 58 mph, and/or penny size hail (3/4 of an inch in diameter) or larger.

Squall lines and multi-cell thunderstorms are organized complexes of thunderstorms that cover large areas and great distances. These storms are often severe. Damaging wind is the main hazard, since they move rapidly, although tornadoes, hail, and heavy rainfall capable of producing flooding are possible as well. Squall lines are most common during the active spring and fall severe thunderstorm months of March, April, May, November, and early December.

Supercell thunderstorms are the most dangerous category of thunderstorms. They can produce long-lived tornadoes, winds in excess of 100 mph, and very large hail. Fortunately, they are not very common, and they usually cover small areas. At times, they can be embedded in clusters of thunderstorms or squall lines. Supercells are most common during the active spring and fall severe thunderstorm months of March, April, May, November, and early December.



Tornadic supercell (Lauderdale County), October 18, 2004

